

# Brookline Fiscal Advisory Committee

May 2, 2019

# **I. S&P's Top 10 Management Characteristics**

II. Town-School Partnership

III. Brookline Financial Forecast Model and Credit Ratios

## Brookline Management Characteristic Scores

# S&P's Top 10 Management Characteristics of Highly Rated State and Local Borrowers

Focus on Structural Balance: Recurring Revenues Match Recurring Expenditures	The use of realistic assumptions in projecting revenues and expenditures.
Strong Liquidity Management	Minimizes the risk of having insufficient resources to meet debt obligations.
Regular Economic/Revenue Updates to Identify Shortfalls Early	Allows for timely and effective budget balancing responses. Distinguish between revenue trends and aberrations.
An Established Rainy Day/Budget Stabilization Reserve	Reserves provide financial flexibility to react to budget shortfalls and unplanned circumstances in a timely manner.
Prioritized Spending Plans and Established contingency plans for operating budgets	Provides risk management of changing economic conditions, intergovernmental funding shifts, budget imbalances, and emerging risks.
Strong Long-Term and Contingent Liability Management	Pensions, postemployment benefits, and other contingent liabilities of both the general and enterprise funds which can cause significant financial stress.
Multi-Year Financial Plan that Considers the Affordability of Actions or Plans Pre-Budget	Having detailed projections and information on costs associated with various policy decisions provides transparency to the budgeting process.
Formal Debt Management Policy to Evaluate Future Debt Profile	Debt affordability guidelines and models enhance the capital budget planning process and related policy decisions.
Capital Planning Process	A comprehensive assessment of capital and infrastructure requirements, including deferred maintenance, better positions the town to execute a cost-effective management strategy.
Well-Defined and Coordinated Economic Development Strategy	Development initiatives and growth prospects affect future revenue-generating capacity.

Brookline Metrics Scores

For each category, score Brookline past (10 years ago), present, and future (given current trajectory) from 0 (worst) to 10 (best).

		Past	Present	Future
Social/Quality of Life	Including: housing affordability, parking availability, traffic/congestion, Park/library usage, crime rate, arrest rate, EMS response time			
Economic	Including: Unemployment rate, credit rating, Area Median Income, diversified revenue sources			
Education	Including: Standardized test scores, student-teacher ratio, spending per pupil, average educational attainment			
Diversity	Including: economic diversity, racial diversity, student diversity, METCO participation, age diversity			
Environmental	Including: Emissions, Carbon usage, energy efficiency, preparedness for Climate Change			

I. S&P's Top 10 Management Characteristics

## **II. Town-School Partnership**

III. Brookline Financial Forecast Model and Credit Ratios

# TOWN/SCHOOL PARTNERSHIP-SUMMARY OF KEY POINTS

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- Established Via Two-Page Memorandum of Understanding Executed in 1995
  - Formulated to provide greater budgeting clarity and equity and to minimize conflict
  - TM only has bottom-line authority over School budget
- Equally allocates marginal increases/deficits in Town Revenues
  - Marginal=Revenues after deducting fixed costs
  - Funds from Proposition 2½ overrides allocated as voted to Town/Schools
- Created seven categories of fixed costs (some with sub-components)
  - Enterprise operations
  - SPED tuitions plus ½ of other SPED costs
  - Growth in enrollments (formula based\*)
  - Reserve funds
  - Programs generating revenue
  - Debt service
  - Tax funded capital

# TOWN/SCHOOL PARTNERSHIP-SUMMARY OF KEY POINTS

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- Other shared costs in proportion to actual experience each year
- Requires Town and Schools to each be responsible for absorbing all respective personnel costs
- Adjustments contemplated for unanticipated state mandates, and extraordinary circumstances

**TOWN OF  
BROOKLINE FY2020  
PROGRAM BUDGET**

**BUDGET MESSAGE**



February 12, 2019

Honorable Members of the Select Board and Members of the Advisory Committee:

I am pleased to submit the Fiscal Year (FY) 2020 annual Financial Plan, including the Budget and the Capital Improvement Plan (CIP) for your consideration. The FY 2020 Budget balances \$335,352,327 in revenues and expenses, including enterprises and other self-supporting operations. This represents an increase of 4.6% over FY 2019.

	<u>FY 2019</u>	<u>FY 2020</u>	<u>\$\$\$ CHANGE</u>	<u>% CHANGE</u>
<b>REVENUES</b>				
Property Tax	224,490,479	239,499,109	15,008,630	6.7%
Local Receipts	29,778,588	29,943,370	164,783	0.6%
State Aid	22,112,759	22,307,826	195,067	0.9%
Free Cash	8,516,286	9,081,257	564,971	6.6%
Other Available Funds	4,872,678	3,188,731	(1,683,948)	-34.6%
Enterprises (net)	30,754,331	31,332,034	577,703	1.9%
<b>TOTAL REVENUES</b>	<b>320,525,121</b>	<b>335,352,327</b>	<b>14,827,206</b>	<b>4.6%</b>
<b>EXPENDITURES</b>				
Municipal Departments	76,244,277	78,134,452	1,890,174	2.5%
School Department	110,658,255	117,235,691	6,577,436	5.9%
Non-Departmental	82,991,348	90,117,382	7,126,034	8.6%
Special Appropriations	10,979,868	9,788,054	(1,191,814)	-10.9%
Enterprises (net)	30,754,331	31,332,034	577,703	1.9%
Non-Appropriated	8,897,045	8,744,711	(152,334)	-1.7%
<b>TOTAL EXPENDITURES</b>	<b>320,525,121</b>	<b>335,352,327</b>	<b>14,827,206</b>	<b>4.6%</b>

Note  
increases in  
municipal  
and school  
line items.



TOWN OF BROOKLINE FY2020 PROGRAM BUDGET	BUDGET MESSAGE		
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Town School Partnership Budget Allocation Formula			
	FY2020 Changes	Town Departments	School Department
<b>Total Revenue</b>	\$14,249,502	\$7,232,777	\$7,016,725
<b>Fixed Cost Sharing</b>	(\$4,819,195)	(\$2,407,623)	(\$2,411,572)
<b>Allocated Fixed Costs</b>	(\$3,678,204)	(\$2,067,191)	(\$1,581,693)
<b>Formula Adjustment</b>	-	-	\$3,553,976
<b>NET BUDGET ALLOCATION</b>	\$5,752,103	\$2,757,963	\$6,577,436
<b>PERCENTAGE INCREASE OVER FY 2019</b>	4.9%	2.5%	5.9%

The Town School Partnership allocation formula makes certain judgments and assumptions that represent fiscal policies of the Town. It is expected that this formula will be part of a larger fiscal policy review initiated by the newly appointed Fiscal Policy Advisory Committee (FPAC). The FPAC is charged with evaluating the long term fiscal condition of the Town and making recommendations to address the “structural gap” that persists between normal revenue growth and expenditure demand. This is never more important as the Town commences a sustained and expensive period of capital expansion and investment in its school building plant. The long-term debt associated with these projects will significantly constrain the Town’s ability to fund other capital needs and will have implications on the cost to operate and maintain these facilities. The ability to identify some funding sources or capacity other than the property tax seems essential for the long term fiscal health of the Town and its residents.

FY2020 TOWN/SCHOOL ALLOCATIONS - CHANGES		17-Apr-19	
	TOTAL	TOWN	SCHOOL
PROPERTY TAXES	\$14,468,272	\$7,234,136	\$7,234,136
LOCAL RECEIPTS	\$164,783	\$82,391	\$82,391
STATE AID	\$195,067	\$97,533	\$97,533
FREE CASH	\$564,971	\$282,486	\$282,486
OTHER AVAILABLE FUNDS*	(\$1,683,948)	(\$733,948)	(\$950,000)
<b>TOTAL REVENUE</b>	<b>\$13,709,144</b>	<b>\$6,962,598</b>	<b>\$6,746,546</b>
<b><u>FIXED COSTS</u></b>			
GOLF ENTERPRISE FUND OVERHEAD	\$92,670	\$92,670	\$0
REC REVOLVING FUND OVERHEAD	\$119,478	\$119,478	\$0
WATER & SEWER OVERHEAD	\$3,904	\$3,904	\$0
REFUSE	\$285,960	\$142,980	\$142,980
RESERVE FUND (0.75% of Prior Yr Net Rev)	\$106,468	\$53,234	\$53,234
DEBT (non Enterprise Fund)	\$3,303,467	\$1,651,734	\$1,651,734
CIP / SPECIAL APPROPRIATIONS / FREE CASH-SUPPORTED	(\$1,362,456)	(\$681,228)	(\$681,228)
SPEC ED TUITION	\$360,000	\$180,000	\$180,000
OTHER SPEC ED	\$440,000	\$110,000	\$330,000
ENROLLMENT GROWTH	\$1,081,680	\$540,840	\$540,840
NON-APPROP	(\$152,334)	(\$76,167)	(\$76,167)
<b>TOTAL FIXED COSTS</b>	<b>\$4,278,837</b>	<b>\$2,137,444</b>	<b>\$2,141,393</b>
<b><u>ALLOCATED FIXED COSTS</u></b>			
PERSONNEL BENEFITS	\$3,049,677	\$1,870,245	\$1,150,112
UTILITIES & MISC BLDG EXP's	\$319,562	\$58,856	\$260,706
INFO TECHNOLOGY / FINANCE APPLICATIONS	\$11,905	\$5,953	\$5,953
PAYROLL DIVISION	\$1,683	\$842	\$842
UNCLASSIFIED (AUDIT & GENERAL INSURANCE)	\$92,122	\$46,061	\$46,061
GENERAL SERVICES (POSTAGE & TELEPHONES)	(\$1,000)	(\$500)	(\$500)
<b>TOTAL ALLOCATED FIXED COSTS</b>	<b>\$3,473,949</b>	<b>\$1,981,456</b>	<b>\$1,463,173</b>
<b>TOTAL COST INCREASE</b>	<b>\$7,752,786</b>	<b>\$4,118,900</b>	<b>\$3,604,566</b>
<b>NET SURPLUS BEFORE COLL BARG &amp; STEPS</b>	<b>\$5,956,359</b>	<b>\$2,843,698</b>	<b>\$3,141,980</b>
<b><u>SCHOOL ALLOCATION</u></b>			
School's Share of Net Surplus			\$3,141,980
SPED Costs		\$ (800,000)	\$800,000
Enrollment Growth		\$ (693,600)	\$693,600
School Bus Program			(\$37,500)
FY19 base allocation - after STM funds used for deficit goes back to base		\$ (428,123)	\$428,123
Override			\$ 1,669,753
Total		\$ 921,975	\$ 6,695,956

**\*Other available funds** includes enterprise items netted out in expenses. Other items vary. For example, funds were reduced by special allocations from the parking meter receipts fund.

Most items split 50/50

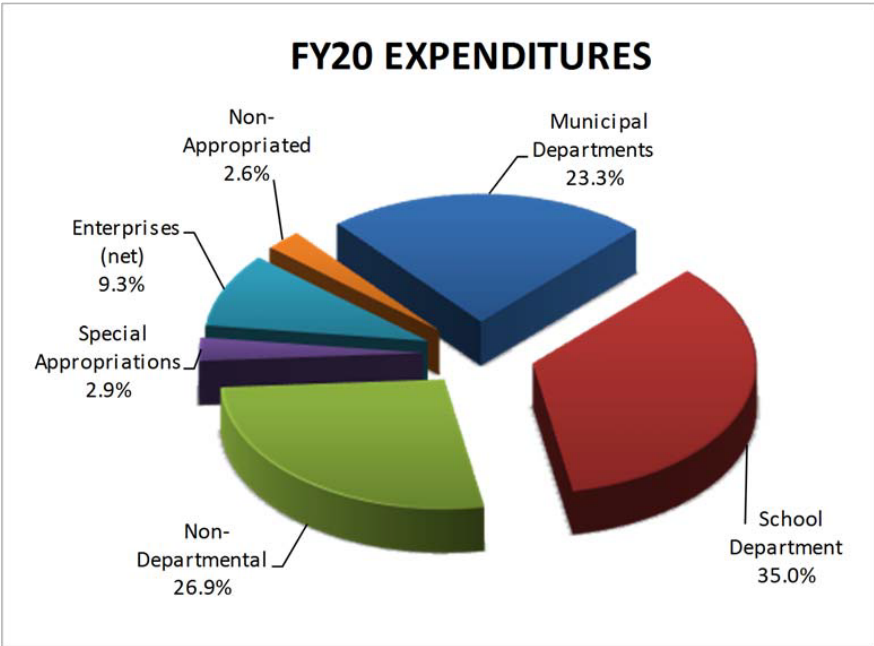
See Personnel detail next slide

See SPED costs from lines 9 and 10. Enrollment growth formula not known

PERSONNEL BENEFITS	TOWN %	SCHOOL %	TOTAL INC	TOWN	SCHOOL
PENSIONS - non-Free Cash	74.0%	26.0%	\$1,740,688	\$990,722	\$749,946
GROUP HEALTH	43.5%	56.6%	\$761,642	\$561,605	\$182,542
HEALTH REIMBURSEMENT ACCOUNT (HRA)	43.5%	56.5%	\$0	\$0	\$0
OPEB's (RETIREE HEA INS) - non-Free Cash	43.5%	56.5%	\$211,515	\$125,214	\$86,301
EMPLOYEE ASSISTANCE	40.0%	60.0%	(\$28,000)	(\$11,200)	(\$16,800)
GROUP LIFE	100.0%	0.0%	\$0	\$0	\$0
DISABILITY INSURANCE	100.0%	0.0%	\$0	\$0	\$0
WORKERS COMP - non-Free Cash	95.0%	5.0%	\$400,000	\$380,000	\$20,000
PUBLIC SAFETY IOD MEDICAL EXPENSES - non-Free Cash	100.0%	0.0%	(\$200,000)	(\$200,000)	\$0
UNEMPLOYMENT - non-Free Cash	47.5%	52.5%	\$0	\$14,463	(\$14,463)
MEDICAL DISAB.	100.0%	0.0%	\$0	\$0	\$0
MEDICARE PAYROLL TAX	36.6%	63.4%	\$163,852	\$9,440	\$142,587
	TOTAL INCREASE Y-Y		\$3,049,677	\$1,870,245	\$1,150,112
FY20 PERSONNEL BENEFITS	TOWN %	SCHOOL %	TOTAL	TOWN	SCHOOL
PENSIONS - non-Free Cash	74.0%	26.0%	\$24,615,433	\$18,215,420	\$6,400,013
GROUP HEALTH	43.5%	56.6%	\$31,507,881	\$13,694,377	\$17,813,504
HEALTH REIMBURSEMENT ACCOUNT (HRA)	43.5%	56.5%			
OPEB's (RETIREE HEA INS) - non-Free Cash	43.5%	56.5%	\$4,181,980	\$1,818,876	\$2,363,103
EMPLOYEE ASSISTANCE	40.0%	60.0%	\$0	\$0	\$0
GROUP LIFE	100.0%	0.0%	\$145,000	\$145,000	\$0
DISABILITY INSURANCE	100.0%	0.0%	\$46,000	\$46,000	\$0
WORKERS COMP - non-Free Cash	95.0%	5.0%	\$1,850,000	\$1,757,500	\$92,500
PUBLIC SAFETY IOD MEDICAL EXPENSES - non-Free Cash	100.0%	0.0%	\$0	\$0	\$0
UNEMPLOYMENT - non-Free Cash	47.5%	52.5%	\$200,000	\$95,000	\$105,000
MEDICAL DISAB.	100.0%	0.0%	\$40,000	\$40,000	\$0
MEDICARE PAYROLL TAX	36.6%	63.4%	\$2,609,403	\$953,998	\$1,655,405
	TOTAL		\$65,195,696	\$36,766,171	\$28,429,525
FY19 PERSONNEL BENEFITS	TOWN %	SCHOOL %	TOTAL	TOWN	SCHOOL
PENSIONS - non-Free Cash	75.3%	24.7%	\$22,874,765	\$17,224,698	\$5,650,067
GROUP HEALTH	42.7%	57.3%	\$30,746,239	\$13,132,771	\$17,630,963
HEALTH REIMBURSEMENT ACCOUNT (HRA)	42.7%	57.3%	\$0	\$0	\$0
OPEB's (RETIREE HEA INS) - non-Free Cash	42.7%	57.3%	\$3,970,465	\$1,695,921	\$2,276,802
EMPLOYEE ASSISTANCE	40.0%	60.0%	\$28,000	\$11,200	\$16,800
GROUP LIFE	100.0%	0.0%	\$145,000	\$145,000	\$0
DISABILITY INSURANCE	100.0%	0.0%	\$46,000	\$46,000	\$0
WORKERS COMP - non-Free Cash	95.0%	5.0%	\$1,450,000	\$1,377,500	\$72,500
PUBLIC SAFETY IOD MEDICAL EXPENSES - non-Free Cash	100.0%	0.0%	\$200,000	\$200,000	\$0
UNEMPLOYMENT - non-Free Cash	40.3%	59.7%	\$200,000	\$80,537	\$119,463
MEDICAL DISAB.	100.0%	0.0%	\$40,000	\$40,000	\$0
MEDICARE PAYROLL TAX	38.6%	61.9%	\$2,445,551	\$944,558	\$1,512,818
	TOTAL		\$62,146,019	\$34,898,186	\$27,279,413

Increase in costs are allocated based on expected experience for the fiscal year.

EXPENDITURES



The Expenditures category of the Town’s budget is comprised of six sections; Municipal Departments, the School Department, Non-Departmental, Special Appropriations, Enterprises and Non-Appropriated. Overall, expenditures in the FY 2020 Budget are \$335,352,327, up by \$14,827,206 for an increase of 4.6% over FY 2019. FY 2020 represents Year 2 of a three-year tax override plan that was approved by Brookline’s voters last May. Year 2 of the override plan allocates an additional \$3.3 million in property taxes to the School Department’s budget. The following is a summary of the FY 2020 recommendations to each category of Expenditures.

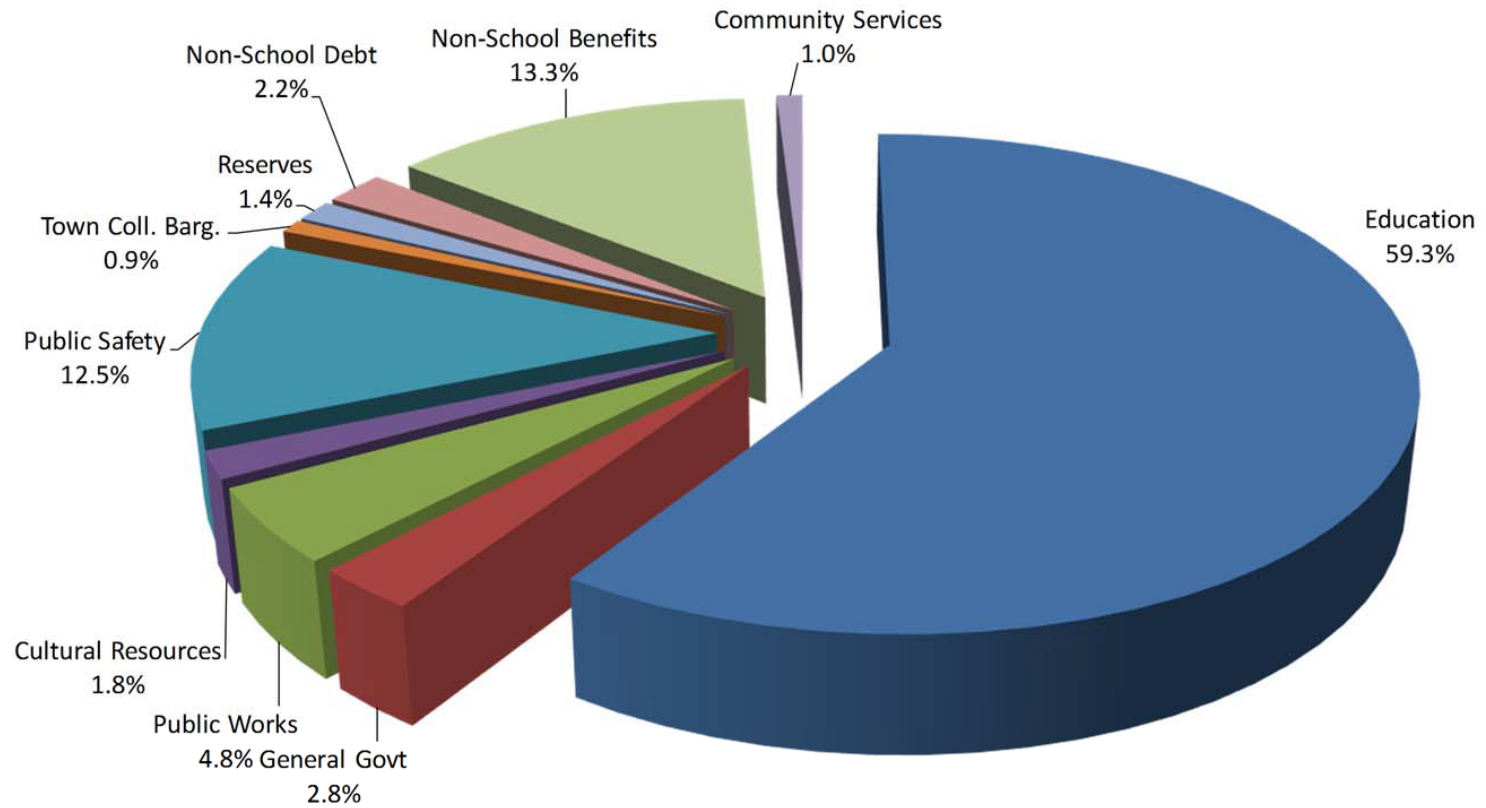
**MUNICIPAL DEPARTMENTS:** The total amount of all municipal department budgets is recommended to be \$78,134,452 in FY 2020, or an increase of 2.5% over FY 2019. This amount includes a reserve to cover collective bargaining agreements with the Town’s various municipal unions.

## TOWN EXPENDITURES ON BEHALF OF SCHOOLS

			FY18			FY19 (est)
Legal			\$ 91,572			\$ 94,777
Recreation			\$ 289,794			\$ 299,937
<b>TOTAL</b>			<b>\$ 381,366</b>			<b>\$ 394,714</b>
Health			\$ 97,180			\$ 100,581
Personnel			\$ 119,650			\$ 117,938
Comptroller			\$ 312,979			\$ 323,933
Audit			\$ 40,500			\$ 40,500
Treasurer			\$ 714,095			\$ 568,467
General Services			\$ 125,000			\$ 125,000
Info Services			\$ 961,447			\$ 995,098
Purchasing			\$ 237,021			\$ 245,317
<b>TOTAL</b>			<b>\$ 2,510,692</b>			<b>\$ 2,416,252</b>
Administrative Support			-			-
DPW			\$ 1,744,267			\$ 1,805,316
Police			\$ 476,172			\$ 492,838
Fire			\$ 27,039			\$ 27,986
Building			\$ 4,835,928			\$ 5,011,121
<b>TOTAL</b>			<b>\$ 7,083,406</b>			<b>\$ 7,337,261</b>
General Insurance			\$ 167,480			\$ 210,415
	<u>FY18 Total Bdgt</u>	<u>School %</u>		<u>FY19 Total Bdgt</u>	<u>School %</u>	
Pensions	21,199,185	24.45%	\$ 5,183,201	22,874,765	24.70%	\$ 5,650,067
Group Health	30,173,026	56.70%	\$ 17,109,517	30,725,287	57.28%	\$ 17,598,521
HRA	0	56.48%	\$ -	0	56.61%	\$ -
Retiree G.H.	3,880,080	56.61%	\$ 2,196,596	3,970,465	57.34%	\$ 2,276,802
Life Insurance	145,000	0.00%	\$ -	145,000	0.00%	\$ -
Workers Comp	1,450,000	5.00%	\$ 72,500	1,450,000	5.00%	\$ 72,500
Unemployment Comp	200,000	37.84%	\$ 75,680	200,000	59.73%	\$ 119,460
Medicare Tax	2,223,228	61.38%	\$ 1,364,539	2,445,551	61.86%	\$ 1,512,818
EAP	28,000	60.00%	\$ 16,800	28,000	60.00%	\$ 16,800
<b>TOTAL</b>			<b>\$ 26,018,833</b>			<b>\$ 27,246,970</b>
Principal			\$ 5,285,000			\$ 6,230,000
Interest			\$ 2,569,203			\$ 3,783,491
BAN's			\$ -			\$ 284,803
<b>TOTAL</b>			<b>\$ 7,854,203</b>			<b>\$ 10,298,294</b>
<b>GRAND TOTAL</b>			<b>\$ 44,113,160</b>			<b>\$ 48,004,487</b>



FULLY ALLOCATED FY2020 GENERAL FUND OPERATING BUDGET



## TOWN-SCHOOL PARTNERSHIP

### PERCEPTIONS, QUESTIONS, POSSIBLE FOCUS IDEAS

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- Partnership perceived as opaque
  - It is opaque, seemingly simple yet complex. Unclear if results are 'unfair' as some believe.
    - Partnership calculations/information different than what is reported by Schools to DESE for Town spending on behalf of schools
    - Greater transparency is needed
- Does it work like the original MOU intended?
  - If not, how should it be modified/rewritten/reworked
- Underlying formulas should be examined (SPED costs [external/internal/in-house programs], enrollment growth, allocations of debt service, costs of new initiatives; are expenses accurately reflective of effort or do things 'even out over time'?)

# TOWN-SCHOOL PARTNERSHIP

## PERCEPTIONS, QUESTIONS, POSSIBLE FOCUS IDEAS

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- A manual is need describing the details of mechanics
  - Definitions of terms
  - Formulas
- Should mechanisms be established to evaluate effectiveness of 'investments'?
  - Belong here or elsewhere in budget processes?
- What happens if/when enrollment growth reverses itself?
- Idea of possible claw-back or loans for \$ beyond 50/50 to be more dynamic?
- Has Town or Schools fallen behind re: maintenance of effort despite partnership.
  - Do new construction and new initiatives mean increased deferred maintenance and/or inability to maintain current levels of service.



## **Town-School Partnership 'Mechanics'**

Guidelines for "splitting" future surplus/deficits have been developed which accomplish the following:

Allocates surpluses or deficits 50%/50% between Town and Schools, after deducting fixed costs from available revenues. Any future override funding is separate and distinct from this agreement and shall not affect the amount of funding to be allocated under this agreement.

Simplifies the definition of fixed costs by reducing the number of fixed cost variables to only seven categories: **(i)** enterprise type operations e.g. water/sewer, refuse; **(ii)** SPED Tuition, plus one half all other SPED costs; **(iii)** student enrollments (based on formula); **(iv)** reserve funds **(v)** programs generating new revenue; **(vi)** debt and interest; and **(vii)** tax funded capital. Items such as step adjustments, election costs, retirement administration will no longer be characterized as "fixed costs". The above fixed cost items **(i through vii)** shall be as customarily defined in the Financial Plan and as

Allocates other shared costs in proportion to actual experience each year. Such allocated costs shall include building, general services, information services, general insurance and personnel benefits.

Requires the Schools and Town to be totally responsible for absorbing all respective personnel costs. Collective bargaining agreements, steps, fringe benefits, etc., will be allocated and will no longer be considered "fixed costs".

I. S&P's Top 10 Management Characteristics

II. Town-School Partnership

**III. Brookline Financial Forecast Model and Credit Ratios**

# How we are connecting Moody's Scorecard to BFAC forecasting model work

- Moody's Major Credit Factors with weights\*:

Broad Rating Factors	Factor Weighting	Sub-Factors	Sub-Factor Weighting
Economy/Tax Base	30%	Tax Base Size:Full Value	10%
		Full Value Per Capita	10%
		Socioeconomic Indices: MFI	10%
Finances	30%	Fund Balance as % of Revenues	10%
		5-Year Dollar Change in Fund Balance as % of Revenues	5%
		Cash Balance as % of Revenues	10%
		5-Year Dollar Change in Cash Balance as % of Revenues	5%
Management	20%	Institutional Framework	10%
		Operating History: 5-Year Average of Operating Revenues / Operating Expenditures	10%
Debt/Pensions	20%	Net Direct Debt / Full Value	5%
		Net Direct Debt / Operating Revenues	5%
		3-Year Average of Moody's Adjusted Net Pension Liability / Full Value	5%
		3-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues	5%

- Currently in process of tying numbers from Moody's ratios to town's audited financials (Balance Sheet, Income statement).
- Will take forecasting numbers and scenarios, track impact on balance sheet, and potential impact on credit factors and rating.

# Moody's Scorecard with Brookline data

Credit Factors	Weight	BROOKLINE (\$000)	Rating	Very Strong	Strong	Moderate	Weak	Poor	Very Poor
				Aaa	Aa	A	Baa	Ba	B & Below
<b>Economy/Tax Base (30%)</b>									
Tax Base Size:Full Value	10%	\$20,944,753	AAA	> \$12B	\$12B ≥ n > \$1.4B	\$1.4B ≥ n > \$240M	\$240M ≥ n > \$120M	\$120M ≥ n > \$60M	<=\$60M
Full Value Per Capita	10%	\$353,522	AAA	>\$150,000	\$150,000 ≥ n > \$65,000	\$65,000 ≥ n > \$35,000	\$35,000 ≥ n > \$20,000	\$20,000 ≥ n > \$10,000	<=\$10,000
Socioeconomic Indices: MFI	10%	209.70%	AAA	> 150% of US median	150% to 90% of US median	90% to 75% of US median	75% to 50% of US median	50% to 40% of US median	<= 40% of US median
<b>Finances (30%)</b>									
Fund Balance as % of Revenues	10%	12.20%	AA	> 30%	30% ≥ n > 15%	15% ≥ n > 5%	5% ≥ n > 0%	0% ≥ n > 2.5%	≤2.5%
				> 25% for School Districts	25% ≥ n > 10% for SD	10% ≥ n > 2.5% for SD	2.5% ≥ n > 0% for SD	% ≥ n > 2.5% for SD	≤ -2.5% for SD
5-Year Dollar Change in Fund Balance as % of Revenues	5%	?	AA?	>25%	25% ≥ n > 10%	10% ≥ n > 0%	0% ≥ n > -10%	-10% ≥ n > -18%	≤ -18%
Cash Balance as % of Revenues	10%	15.90%	AAA	>25%	25% ≥ n > 10%	10% ≥ n > 5%	5% ≥ n > 0%	0% ≥ n > -2.5%	≤ -2.5%
				>10% for School Districts	10% ≥ n ≥ 5% for SD	5% ≥ n > 2.5% for SD	2.5% ≥ n > 0% for SD	0% ≥ n > -2.5% for SD	≤ -2.5% for SD
5-Year Dollar Change in Cash Balance as % of Revenues	5%	?	AAA?	>25%	25% ≥ n > 10%	10% ≥ n > 0%	0% ≥ n > -10%	-10% ≥ n > -18%	≤ -18%
<b>Debt/Pensions (20%)</b>									
Net Direct Debt / Full Value	5%	0.70%	AAA	<0.75%	0.75% ≤ n < 1.75%	1.75% ≤ n < 4%	4% ≤ n < 10%	10% ≤ n < 15%	>15%
Net Direct Debt / Operating Revenues	5%	0.5x	AA	< 0.33x	0.33x ≤ n < 0.67x	0.67x ≤ n < 3x	3x ≤ n < 5x	5x ≤ n < 7x	>7x
3-Year Average of Moody's Adjusted Net Pension Liability / Full Value	5%	2.10%	AA	< 0.9%	0.9% ≤ n < 2.1%	2.1% ≤ n < 4.8%	4.8% ≤ n < 12%	12% ≤ n < 18%	>18%
3-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues	5%	1.5x	A	< 0.4x	0.4x ≤ n < 0.8x	0.8x ≤ n < 3.6x	3.6x ≤ n < 6x	6x ≤ n < 8.4x	>8.4x
<b>Management (20%)</b>									
Institutional Framework: legal ability to match resources with spending	10%	?	AA?	Very strong	Strong	Moderate	Limited	Poor	Very Poor or None
Operating History: 5-Year Average of Operating Revenues / Operating Expenditures	10%	?(0.99)	A?	> 1.05x	1.05x ≥ n > 1.02x	1.02x ≥ n > 0.98x	0.98x ≥ n > 0.95x	0.95x ≥ n > 0.92x	≤0.92x

Source:

Moody's Approach to Local Government Credit Analysis 2019, pp 18, Brookline June 2018 Audited Financial Statements

Ratings in Blue Italics signify estimate, to be updated.

# Appendix: Definition of Moody's Scorecard Factors

Rating Factors	Definition/How Calculated
<b>Economy/ Tax Base (30%)</b>	
Total Full Value (\$000)	Full value, i.e. the market value of taxable property accessible to the municipality. Often calculated as a multiple of assessed value, or the book value of properties on the tax rolls. Methods for calculating vary by state.
Population	US Census Bureau
Full Value Per Capita	Calc, Full value divided by population
Median Family Income (% of US Median)	Median family income/ US median Income (source: American Community Survey)
<b>Finances (30%)</b>	
Operating Revenue (\$000)	Operating revenues
Fund Balance (\$000)	Operating funds assets minus operating funds liabilities, adjusted for other resources or obligations that are available for operating purposes)
Cash Balance (\$000)	Operating funds net cash (cash minus cash-flow notes)
Fund Balance as a % of Revenues	Operating funds assets minus operating funds liabilities, adjusted for other resources or obligations that are available for operating purposes) as a percentage of operating revenues
Cash Balance as a % of Revenues	Operating funds net cash (cash minus cash-flow notes) as a percentage of operating revenues
<b>Debt/Pensions (20%)</b>	
Net Direct Debt (\$000)	Gross debt minus self-supporting debt
3-Year Average of Moody's ANPL (\$000)	The average of Moody's-adjusted Net Pension Liability (as calculated in Appendix B) in each of the past three years, as a percentage of full value
Net Direct Debt / Full Value (%)	Calc
Net Direct Debt / Operating Revenues (x)	Calc
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	Calc
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	Calc